

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-8. **(Cancelled)**

9. **(Currently Amended)** A laser driver comprising:

a first PNP transistor current source coupled to a first inductor, the first inductor coupled to a first side of a laser diode;

a second PNP transistor current source coupled to a second inductor, the second inductor coupled to a second side of the laser diode;

a first switch coupled to the first inductor;

a second switch coupled to the second inductor;

a control signal source that controls the first switch and the second switch according to a data signal such that the first switch is open when the second switch is closed and such that the first switch is closed when the second switch is open; and

a current sink coupled to the first side of the laser diode when the first switch is closed and to the second side of the laser diode when the second switch is closed, wherein the first PNP transistor current source and the first inductor and the second PNP transistor current source and the second inductor and the current sink are configured to provide:

a first current to the laser diode when the first switch is closed and the second switch is open; and

a second current to the laser diode when the first switch is open and the second switch is closed.

10. **(Previously presented)** The laser driver of claim 9, wherein the first PNP transistor current source comprises a first PNP transistor current mirror and the

second PNP transistor current source comprises a second PNP transistor current mirror.

11. **(Previously presented)** The laser driver of claim 9, wherein the first switch and the second switch operate in response to a data signal.

12. **(Previously presented)** The laser driver of claim 11, wherein the data signal sets an output of the laser diode to one of a logic high optical signal and a logic low optical signal.

13. **(Previously presented)** The laser driver of claim 9, wherein the first inductor and the second inductor are sized to reduce intersymbol interference of an output of the laser diode to a desired level.

14. **(Previously presented)** The laser driver of claim 9, wherein the first PNP transistor current source, the second PNP transistor current source, the first switch, the second switch, the first inductor, the second inductor, and the current sink are on a single semiconductor chip.

15-21. **(Cancelled)**

22. **(Currently Amended)** A method for driving a laser comprising:
receiving a data signal;
operating a first switch and a second switch in response to the data signal;
and
supplying a first differential current to a laser when the first switch is closed and the second switch is open and supplying a second differential current to the laser when the first switch is open and the second switch is closed, wherein the first differential current and the second differential current are supplied to the laser by a first PNP transistor current source through a first inductor to a first side of the laser and from a second PNP transistor current source through a second inductor to a second side of the laser and from a current sink, wherein the current sink is connected to both the first switch and the second switch, and is connected to the first side of the laser through the first switch when the first switch is closed and to the second side of the laser through the second switch when the second switch is closed.

23. **(Previously presented)** The method of claim 22, wherein the first differential current comprises a bias current and a modulation current.

24. **(Previously presented)** The method of claim 22, wherein the second differential current comprises a bias current.

25. **(Previously presented)** The method of claim 22, wherein the first switch comprises a first transistor switch and the second switch comprises a second transistor switch.

26. **(Previously presented)** The method of claim 25, wherein the first transistor switch comprises a first NPN transistor switch and the second transistor switch comprises a second NPN transistor switch.

27. **(Previously presented)** The method of claim 22, wherein the first switch is closed and the second switch is open to drive the laser to output a logic low optical signal and the first switch is opened and the second switch is closed to drive the laser to output a logic high optical signal.

28. **(Previously presented)** The method of claim 22, wherein the first PNP transistor current source comprises a first PNP transistor current mirror and the second PNP transistor current source comprises a second PNP transistor current mirror.